

Observations of the Comet Rordame-Quénisset (b 1893), made at the Liverpool Observatory. By W. E. Plummer.

The following observations were made with the Liverpool refractor of 8 inches aperture, employing either a filar micrometer or the arrangement of cross-bars recommended by Colonel Tupman, and referred to in the *Monthly Notices*, April 1893, p. 380. The references to each micrometer are the same as those mentioned in that place. With the filar micrometer the power used is 100, and with the 'reticule' either 40 or 62. The observations have been corrected for refraction in the manner suggested by the late Professor Challis. No correction has been applied for parallax. The horizontal equatorial parallax of the sun has been assumed $8''.848$.

Greenwich Mean Solar Time of Observation.				♂-★R.A.		No. of Compari- sons.	Apparent R.A. of ♂.		★-♂ Declination.		No. of Compari- sons.	Apparent Declination of ♂.			Log Factor of Parallax (α).	Log Factor of Parallax (δ).	Star of Com- parison.	
d	h	m	s	m	s		h	m	s	'	"		°	'	"			
1893 July	14	10	6	30	+ 4	26.91	10	10	12	52.83	+ 7	41.5	5	+ 38	36	35.6	0.8170	a
	14	10	14	10	+ 4	32.82	Ret.	10	12	58.74	+ 6	55.3	Ret.	38	35	49.4	0.8239	a
	15	10	21	15	- 0	59.93	7	10	29	50.49	- 2	50.0	4	36	15	58.3	0.8266	b
					- 2	56.52	7	10	29	50.37	- 18	28.4	4	36	15	55.8	...	c
	17	10	45	16	- 3	3.98	Ret.	10	55	44.67	- 1	39.2	Ret.	31	59	13.7	0.8431	d
					+ 0	8.42	...	10	55	44.60	+ 9	50.0	...	31	59	15.3	...	e
	20	9	22	40	- 0	24.51	10	11	20	38.94	- 5	1.8	4	26	54	0.9	0.7880	f
	21	9	34	41	+ 2	36.75	10	11	26	51.87	- 5	10.7	5	25	27	4.2	0.8017	g
					+ 2	27.24	10	11	26	51.75	- 1	23.3	5	25	27	5.9	...	h
	22	10	11	25	- 2	15.27	Ret.	11	32	20.35	- 11	26.8	Ret.	24	6	38.8	0.8286	i
					- 2	20.72	...	11	32	20.40	- 4	4.1	...	24	6	36.5	...	j
	24	9	37	16	+ 1	58.00	3	11	40	53.63	- 7	8.0	3	21	51	12.2	0.8145	k
	27	9	50	18	- 4	41.89	Ret.	11	50	27.69	+ 9	13.3	Ret.	19	5	4.8	0.8278	l
Aug.	3	9	26	0	- 2	47.57	...	12	3	42.55	+ 3	1.8	...	14	39	48.7	0.8353	m
					+ 0	44.56	...	12	3	42.69	+ 0	38.3	...	14	39	46.5	...	n
	5	9	27	42	- 1	27.26	10	12	6	12.48	+ 4	13.8	5	13	43	35.0	0.8396	o
	7	9	23	29	+ 2	40.54	10	12	8	21.90	- 10	28.7	5	12	53	30.5	0.8414	p
					- 0	16.21	...	12	8	21.47	+ 9	0.4	...	12	53	32.2	...	q
	8	9	27	55	+ 0	26.71	Ret.	12	9	20.40	+ 5	28.2	Ret.	+ 12	30	34.6	0.8443	r

Mean Places of Stars of Comparison.

Star's Designation or Authority.	Mean R.A. 1893°.			Corr. to Apparent Place.	Mean Declination, 1893°.			Corr. to Apparent Place.	Letter of Reference.
	h	m	s		°	'	"		
Paris Catalogue, No. 12530	+0°56	+38	28	47.2	+6.9	a
" " No. 12987	+0°64	36	18	41.8	+6.5	b
Weisse Bessel, x., No. 609	+0°65	36	34	17.7	+6.5	c
Leiden Zones, 170, No. 38	+0°73	32	0	47.8	+5.1	d
" " 170, No. 34	+0°73	31	49	20.1	+5.2	e
Weisse Bessel, xi., No. 347	+0°78	26	58	59.2	+3.5	f
Paris Catalogue, No. 14042	+0°78	25	32	11.8	+3.1	g
" " " 14044	+0°78	25	28	26.1	+3.1	h
" " " 14245	+0°79	24	18	3.0	+2.6	i
" " " 14247	+0°79	24	10	40.6	+2.6	j
Bonn Zones, vol. vi., +22°, No. 2396	+0°80	21	58	18.4	+1.8	k
Weisse Bessel, xi., No. 1041	+0°81	18	55	50.7	+0.8	l
" " xii., No. 92	+0°78	14	36	47.5	-0.6	m
Bonn Zones, vol. vi., +14°, No. 2476...	+0°78	14	39	8.8	-0.6	n
" " " +13°, No. 2507...	+0°77	13	39	22.2	-1.0	o
Sch. No. 4395	+0°75	13	4	0.4	-1.2	p
" No. 4415	+0°76	12	44	33.1	-1.3	q
Weisse Bessel, xii., No. 95	+0°76	+12	25	7.8	-1.4	r

Notes.

July 14.—The star place differs somewhat from that given for No. 2117, zone 38° of the Bonn Catalogue.
July 15.—The comet was seen some time before a star of comparison could be seen on the light summer sky.
July 17.—Clouds interfered: the observation was not satisfactory. The condensation observed was north of the centre of the figure.
July 27.—The moon was bright, but the comet was still easily visible.
All the August observations were difficult. A haze rose from the sea and rendered observations near the horizon doubtful..

Nov. 1893.

Comet Rordame-Quénisset.

37

From the observations of July 14, 20 and August 3 the following orbit was computed :

Perihelion Passage, July 7, 2764 G.M.T.

ω	$47^{\circ} 7' 54''.2$	} M. Eq. 1893.0
Ω	$337 20 41.0$	
i	$159 57 35.2$	
$\log q$	9.829016	

From these elements an ephemeris was computed for the end of October, and a careful watch kept upon the places where the comet might be expected to be visible, but without effect.

Liverpool Observatory :
1893 November 7.

Observations of Brooks' Comet (c 1893), made at the Royal Observatory, Greenwich.
(Communicated by the Astronomer Royal.)

The observations were made with the East, or Sheepshanks, equatorial, aperture 6·7 inches, by taking transits over two cross wires at right angles to one another, and each inclined 45° to the parallel of declination.
The observations are corrected for refraction, but not for parallax. They are also corrected for the error of inclination of the wires and for the motion of the comet.

Greenwich Observations																	LIV. I,		
Greenwich Mean Solar Time.	Observer.	—*R.A.			Log Factor of Parallax.	Corr. for Refraction.	s	—*N.P.D.	Log Factor of Parallax.	Corr. for Refraction.	No. of Comps.	Appt. R.A. of ♀.			Appt. N.P.D. of ♀.	Comp. Star.			
		h	m	s								h	m	s			°	'	"
1893. Oct.	18 16 58 18	A.C.	+	6	10 24	9 5766	+0 04	+ 7 51 8	0 8151	+0 4	1	12 24	1 63	75 55	4 2	a			
	18 17 3 47	"	-	2	54 02	9 5754	+0 05	+ 9 26 5	0 8131	+0 5	1	12 24	1 24	75 54	38 9	b			
	18 17 3 47	"	-	15	32 07	9 5754	-0 01	- 0 58 2	0 8131	0 0	1	12 24	1 82	75 54	35 3	c			
	18 17 3 47	"	-	16	4 20	9 5754	-0 03	- 5 29 0	0 8131	-0 2	1	12 24	1 19	75 54	39 5	d			
	22 16 35 7	B.	-	4	10 97	9 5842	+0 03	+ 3 54 7	0 8135	+0 2	1	...	...	...	...	g
	22 16 55 47	"	+	3	19 40	9 5801	+0 02	+ 3 50 6	0 8038	0 0	2	...	...	...	...	f
	22 16 58 33	"	+	0	19 15	9 5794	+0 01	+ 2 6 6	0 8026	0 0	2	...	...	...	...	e
	22 17 8 29	A.C.	+	3	20 82	9 5757	+0 01	+ 3 13 6	0 7977	0 0	3	...	...	...	...	f
	25 17 12 4	"	-	0	0 15	9 5760	-0 02	- 6 57 2	0 7838	-0 2	5	...	...	...	...	h
	25 17 15 29	"	-	2	43 83	9 5744	+0 01	+ 4 40 3	0 7820	+0 1	2	12 33	37 13	71 9	43 2	i			
	25 17 15 29	"	-	3	24 06	9 5744	0 00	+ 1 24 8	0 7820	+0 1	2	12 33	37 06	71 9	47 5	k			
	26 16 12 40	B.	-	1	3 90	9 5917	+0 05	+ 8 19 8	0 8121	+0 4	3	12 35	0 97	70 28	43 8	l			
	26 16 17 57	"	-	0	2 08	9 5916	-0 05	- 9 20 4	0 8094	-0 4	3	12 35	0 84	70 28	47 8	m			
	30 16 28 34	"	+	2	6 78	9 5976	+0 02	+ 6 45 5	0 7874	0 0	3	12 41	13 48	67 31	49 5	n			
	30 16 35 58	"	-	1	21 65	9 5956	-0 04	- 15 29 5	0 7824	-0 1	3	12 41	13 07	67 31	27 8	o			